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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/508,406	09/21/2004	Mikinori Matsuda	258319US6PCT	6209
22850	7590	10/10/2006		
C. IRVIN MCCLELLAND OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314				
			EXAMINER DANIELSEN, NATHAN ANDREW	
			ART UNIT 2627	PAPER NUMBER

DATE MAILED: 10/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/508,406	Applicant(s) MATSUDA ET AL.	
	Examiner Nathan Danielsen	Art Unit 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-15 is/are pending in the application.
- 4a) Of the above claim(s) 6-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1 and 3-15 are pending. Claims 6-15 have been withdrawn as being drawn to a non-elected invention in Applicant's lack of unity response dated 23 September 2005. Claim 2 has been canceled in Applicant's amendment dated 07 March 2006.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1 and 3-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "substantially horizontal level" in claim 1 renders the scope of the claim indefinite. The term "horizontal" indicates that the slider must be parallel to the horizon in order for the reference planes to then be substantially level/parallel to it. This renders the claim indefinite because the cartridge, during transit and even during recording/reproduction, may not be parallel to the horizon, and thus would no longer meet the limitations of the claim.

Claim 3 recites the limitation "said other recording medium" in lines 6 and 10-12. Claim 4 recites the limitation "said other recording medium" in lines 8 and 9. There is insufficient antecedent basis for this limitation in the claim. Claim 5 is rejected as being indefinite because it is dependent on an indefinite claim.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

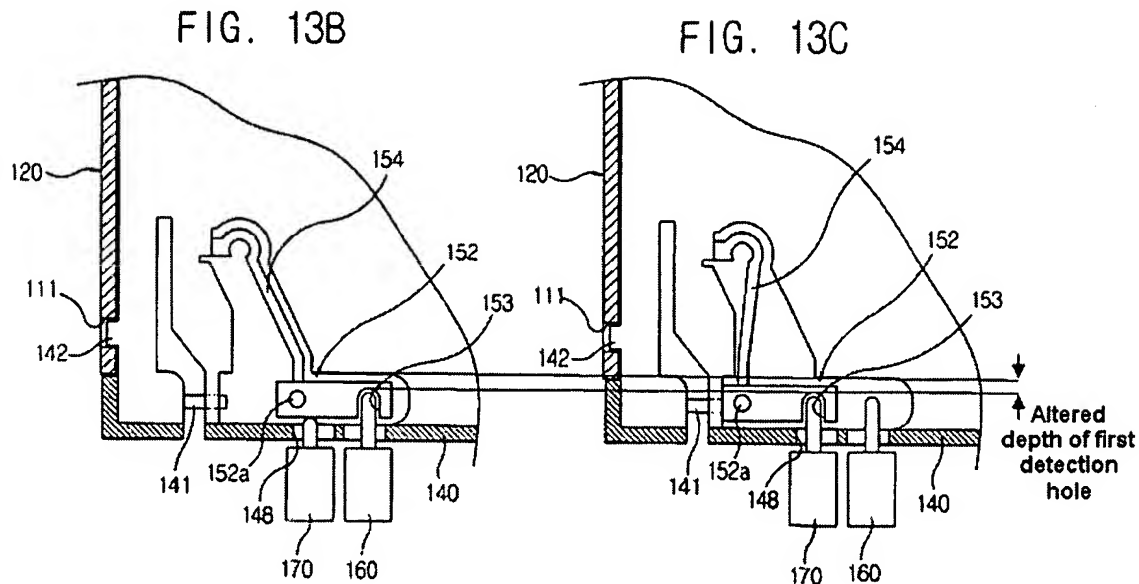
6. Claim 1 is rejected under 35 U.S.C. 103(a) as being obvious over Ko et al (US Patent 6,574,189; hereinafter Ko).

Regarding claim 1, Ko discloses a recording medium housed in a cartridge, comprising:

at least a first detection hole (A1 sensor hole 124 in figures 6, 12, and 13) and a second detection hole (A3 sensor hole 125 in figures 6, 12, and 13) formed at a predetermined position on a reference plane of said cartridge (figure 6); and

a slider (opening/closing member 152) configured to open and close said second detection hole (figure 13) and, when said detection hole is in a closed state, forming a plane substantially horizontal level with the reference plane of said cartridge at the position of said detection hole and said first detection hole is in an open state at all times once a tap is removed (figure 13),

wherein the slider includes a portion altering the depth of the first detection hole with respect to the reference plane upon closing said second detection hole (see figures 13B and 13C below).



However, Ko fails to disclose where the first detection hole is in an open state at all times.

In the same field of endeavor, the omission of an element and its function is obvious if the function of the element is not desired (see MPEP § 2144.04(II)(A)). Therefore, since the device of Ko meets the limitations of claim 1 with the removal of tap 124a and Applicant does not want the functionality of tap 124a, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have removed tap 124a, for the purpose of not having an element causing the first detection hole to be in a closed state at any point in time.

7. Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ko, in view of Mukawa et al (US Patent 5,745,451; hereinafter Mukawa).

Regarding claim 3, Ko discloses where an external form of said cartridge is substantially similar to an external cartridge form of another recording medium having at least a first detection hole and a second detection hole at predetermined positions on a reference plane of the external cartridge housing the another recording medium, and said recording medium and said other recording medium are in a category of recording media that can be loaded into an identical apparatus (figure 6). However, Ko fails to disclose the specific purposes of the sensor holes in the claimed recording medium and other recording medium.

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In the same field of endeavor, Mukawa discloses where the second detection hole of said recording medium indicates that writing is prohibited when the second detection hole (Fig. 18, element 101) of said recording medium is in an open state (column 11, lines 8-9) and the first detection hole (element 102) of said other recording medium indicates that writing is prohibited when the first detection hole of said other recording medium is in an open state (column 6 lines 31-36), and the second detection hole of said other recording medium indicates reflectivity of the disk (column 11, line 12).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used the sensor holes and slider of Ko in the manner indicated by Mukawa, for the purpose of provide a disc cartridge in which the type of the optical disc accommodated therein may be determined easily and promptly (col. 3, lines 26-28).

Regarding claim 4, Ko discloses everything claimed, as applied to claim 3. Additionally, Ko discloses where the second detection hole of said recording medium is opened and closed according to operation of an operating projection (recess 152b in figure 12) disposed at a predetermined position of said cartridge (figure 12), and operating directions of opening and closing of the second detection hole of said recording medium on a basis of a direction of operation of the operating projection of said recording medium are identical with operating directions of opening and closing of the first detection hole of said other recording medium on a basis of operation of an operating projection of said other recording medium (figure 13 where moving opening/closing member 152 toward the A3 sensor hole 124 causes the A1 sensor hole to close, which is what is shown in Applicant's figures 10A and 10C).

Regarding claim 5, Ko discloses where a material thickness of said opening and closing slider moved according to the operation of said operating projection is greater than a material thickness of a portion under a bottom surface of said first detection hole (figures 12 and 13).

Response to Arguments

8. Applicant's arguments filed 25 July 2006 have been fully considered but they are not persuasive.
 - a. Applicant argues that "removal of the tap causes the identified 'second detection hole (125)' to be opened, not closed, as recited in the Applicants' claims" (page 4). The examiner

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disagrees. Ko discloses that like elements of the second embodiment are given the same element numbers and have been described earlier. Since the description of the earlier embodiment (see figures 7-10, specifically figure 10) describes that the returning lever 141 pulls the opening/closing member 152, thereby shifting the opening/closing member 152, which was moved to the open-position of the A3 sensor hole 125, to the close-position (col. 11, line 59 through col. 12, line2). Therefore, removal of the tap 124a causes the second detection hole to become openable and closable.

b. Applicant further argues that "Ko does not disclose, or suggest, a slider, which provides a first detection hole in an open state at all times, nor a slider including a portion for altering the depth of a first detection hole with respect to the reference plane upon closing a second detection hole" (page 4). The examiner disagrees. As shown above, removing tap 124a from Ko's invention would have been obvious. Therefore, the rejection is maintained.

c. In order to overcome this rejection, it is the recommendation of the examiner that limitations drawn to element 93b in figures 10A-10E be incorporated into claim 1 in order to overcome at least the prior art of record. Specifically, the recommended limitations would be drawn to the fact that element 93b protrudes from the slider into the second detection hole through the shell of the cartridge such that at least a plane will pass through both sides of the shell as well as element 93b.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan Danielsen whose telephone number is (571) 272-4248. The examiner can normally be reached on Monday-Friday, 8:30 AM - 4:30 PM Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, A.L. Wellington can be reached on (571) 272-4483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nathan Danielsen
09/20/2006

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